

MISZCZAK ET AL.  
"Ultra Low Carbon Metal-Core Weld Wire"  
Atty. Docket No. 8313

Appl. No. 09/227,242  
Examiner M. Elve  
Art Unit 1725

Page 2, line 2, delete "are" and insert - - is - - .

In the Claims:

1. (Amended) A metal-core weld wire for gas shielded welding, comprising:  
a low carbon steel sheath having a carbon content of [not more] less than 0.005  
[0.008] % C;  
a metal-core composition [that is] between approximately 16 % and  
approximately 20 % of a total weight of the metal-core weld wire,  
whereby the metal-core weld wire has a relatively reduced fume generation rate.

Cancel Claim 2 without prejudice.

15. (Amended) The metal-core weld wire of Claim 12, [the total weight of  
the metal-core weld wire,] the metal-core composition comprises between approximately  
0.0025 % C and approximately 0.0046 % C.

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Add the following New Claims:

21. A low fume metal-core weld wire for gas shielded welding, comprising:  
a low carbon steel sheath having a carbon content of not more than  
approximately 0.008 % C;

a metal-core composition between approximately 16 % and approximately 20  
% of a total weight of the metal-core weld wire,

the metal-core composition comprises between approximately 0.0019 % C and  
approximately 0.0047 % C based on the total weight of the metal-core weld wire.

22. The metal-core weld wire of Claim 21, the metal-core composition between  
approximately 17 % and approximately 19 % of the total weight of the metal-core weld wire,  
the metal-core composition comprises between approximately 0.0025 % C and approximately  
0.0046 % C based on the total weight of the metal-core weld wire.

23. The metal-core weld wire of Claim 22, the metal-core composition  
comprises between approximately 1.46 % Fe-Mn and approximately 1.62 % Fe-Mn.

24. The metal-core weld wire of Claim 23, the metal-core composition

5 comprises between approximately 2.85 % Fe-Si and approximately 3.15% Fe-Si, between approximately 12.90 % Fe-Mn-Si and approximately 14.26 % Fe-Mn-Si, between approximately 0.52 % Fe-Ti and approximately 0.58 % Fe-Ti, and the balance Fe powder and trace impurities.

25. The metal-core weld wire of Claim 24, the steel sheath comprises between approximately 0.250 % Mn and approximately 0.500 % Mn, not more than approximately 0.025 % P, not more than approximately 0.015 % S, not more than approximately 0.040 % Si, not more than approximately 0.025 % Al, and not more than approximately 0.005 % N.

26. The metal-core weld wire of Claim 21, the metal-core composition comprises between approximately 1.23 % Fe-Mn and approximately 1.56 % Fe-Mn.

27. The metal-core weld wire of Claim 26, the metal-core composition comprises between approximately 2.40 % Fe-Si and approximately 3.60% Fe-Si, between approximately 10.86 % Fe-Mn-Si and approximately 16.30 % Fe-Mn-Si, between approximately 0.44 % Fe-Ti and approximately 0.66 % Fe-Ti, and the balance Fe powder.

( Continued on the following page. )